



State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

CHRISTINE TODD WHITMAN
Governor

JANE M. KENNY
Commissioner

WEATHERIZATION BULLETIN #701

September 28, 1998

To: Executive Directors and Weatherization Managers

From: Clarice S. Sabree-Sylla, Supervisor, OLIEC

Affected Programs: DOE DHS HIP

Topic: Adequacy of Staff

Reference: (1) none

Revision Scope: Specifies that weatherization agencies must have access to the expertise required to operate an effective weatherization program. Eliminates the distinction between heating system specialists and estimator/evaluators. Eliminates out-of-date reference to the TFP program.

Summary: It is the responsibility of the agency to ensure that sufficient expertise is available to operate the weatherization program effectively. The number of full-time staff required for effective implementation is proportional to the size of the individual program. Additional expertise can be provided through a variety of alternative innovative strategies. OLIEC suggests that the minimum required staff is a weatherization manager and a technical field representative. Adequacy of staff is one of the factors which are measured by the subgrantee rating system. OLIEC field monitors will continue to evaluate this factor as a routine part of their agency visits.



Effective administration of the weatherization program at the local implementation level requires considerable skill and knowledge in a wide variety of subject areas. There are numerous methods available to meet these needs.

The most traditional approach is to employ an already knowledgeable individual on a full-time basis. There are also innovative strategies which can supply the needed expertise. Neighboring agencies can consider a joint hire, for example, whereby one individual splits her/his time between two or more agencies. Heating system evaluations and inspections can be subcontracted on a per-job or piece-rate basis. Moreover, promising candidates can be identified within the organization and provided with learning opportunities and gradually increasing job responsibilities.

Whatever methods are used, it is the responsibility of the agency to ensure that sufficient expertise is available to operate the weatherization program effectively. The number of full-time staff required for effective implementation is proportional to the size of the individual program. OLIEC suggests that the minimum required staff is a weatherization manager and a technical field representative. A qualified technical representative is capable of performing the job duties performed by both the estimator/evaluator and the heating system specialist. Weatherization subgrantee agencies have the option of either continuing to differentiate between the two positions or consolidating the job responsibilities into the position of technical field representative. The OLIEC will continue to provide cross-training opportunities at regularly scheduled weatherization conferences to facilitate the skills development of all field personnel.

It is imperative that no one be required to perform duties beyond his/her competence and ability. OLIEC encourages an ongoing program of staff development to expand the abilities of everyone involved with the program at all levels. Operational duties currently beyond the abilities of regular full-time staff should be delegated to others (through sub-contracting, job-sharing, etc.) while the missing expertise is developed.

Adequacy of staff is one of the factors which are measured by the subgrantee rating system. OLIEC field monitors will continue to evaluate this factor as a routine part of their agency visits. OLIEC believes that an adequate staff will be evidenced through effective program implementation, and a determination of inadequate staff can also be supported through observation of program shortcomings.



State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

CHRISTINE TODD WHITMAN
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WEATHERIZATION BULLETIN #702

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Contractor Non-cooperation

Agencies who are experiencing difficulty with contractors who are refusing to do retrofits and/or replacements in certain areas, particularly urban areas should take the following action:

1. Request specific reasons from the contractor for refusing the job. Contractors have the right to refuse a job that they believe cannot be completed successfully for health and safety reasons, or because it is not their regular service territory.
2. Follow up in writing to the contractor and send a copy to this office.
3. If it is determined that a contractor is "redlining" or refusing to work in low income areas, that may constitute a violation of the non discrimination clause in the grant contract.

CSS/bam/1834R





State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS


DONALD T. DiFRANCESCO
Acting Governor

WEATHERIZATION BULLETIN #703

JANE M. KENNY
Commissioner

September 28, 2001

To: Executive Directors & Weatherization Managers

From: Clarice Sabree-Sylla, Supervisor, OLIEC 

Affected Programs: DOE, DHS, HIP

Topics:

1. Efficiency Standards applicable to the selection and/or final inspection of oil burner retrofits and replacement heating systems.
2. Waiver process to follow when the standards cannot be met.
3. Alternate Standards applicable to specific situations.
4. References to use to verify that pre-installation rated efficiencies meet applicable standards.

Reference:

1. Weatherization Bulletin #711
2. Weatherization Bulletin #725

Revision Scope:

This Bulletin collects information previously found in five separate Bulletins. In addition, it lists a reference to use when verifying the rated efficiency of larger boiler systems.

Summary:

This Bulletin does not change the information found in the five Bulletins it supersedes. New information is added concerning use of Boiler Ratings and Efficiencies (published by The Hydronics Institute, Inc.) as a source to verify conformance with pre-installation efficiency standards. Also, effective the date of this bulletin, all power vented heating system are to be tested for proper combustion standards.



This Bulletin restates the efficiency standards applicable to both the retrofit of oil-fired heating systems and the installation of new gas – or oil-fired heating systems.

OIL BURNER RETROFIT

Following the installation of an oil burner retrofit, the following standards shall be verified by the agency heating system specialist:

1. A minimum carbon dioxide reading of 10.5%
2. A maximum reading of 1 on the Bacharach smoke scale
3. A minimum Steady State Efficiency of 80%
4. A maximum carbon monoxide level of 100pm as measured in the flue air
5. A draft reading/test to ensure flue gases are venting properly

All five of these standards must be achieved for the retrofitted unit to pass inspection. It will not be possible in all cases to achieve this result. For example, General Electric Boilers with a model # prefix of "NA" (recognizable by their similarity to water storage tanks, a smoke pipe which exists the unit from the bottom, and the location of the oil line, controls and burner at the top of the unit) often do not meet standard. Whenever all five standards are not achieved, the contractor should be informed of the agency test result and requested to return to the unit to make the needed adjustments.

Blanket waivers have been issued to cover all instances involving either horizontal furnaces or furnaces located in mobile homes. In these cases, the Steady State Efficiency requirement (as verified through the post-installation combustion testing procedure) has been reduced to 78%. The standards for smoke, carbon dioxide, and carbon monoxide are not changed for these installations.

REPLACEMENT OIL-FIRED HEATING SYSTEMS

The post-installation inspection procedures, standards, and waiver process are as described above for oil burner retrofits.

Replacement heating systems are also subject to standards based on their rated efficiencies. The agency must verify these ratings before heating systems are approved for installation. Ratings are verified by checking the proposed unit's efficiency in the most current edition of directories of independent trade associations, such as the Gas Appliance Manufacturers' Association's Consumer's Directory of Certified Efficiency Ratings or The Hydronics Institute's Boiler Ratings And Efficiencies.

The pre-installation standard applicable to oil-fired replacement heating systems is based on Steady State Efficiency. If the Steady State Efficiency is not explicitly listed in the applicable trade reference, it may be calculated by dividing the BTU output by the BTU input.

The pre-installation standard for proposed replacement oil-fired heating systems is a minimum Steady State Efficiency of 80% for mobile homes, the pre-installation standard is a minimum of Steady State Efficiency of 78%.

REPLACEMENT GAS-FIRED HEATING SYSTEMS

The pre-installation standard applicable to gas-fired replacement heating systems is based on Annual Fuel Utilization Efficiency (AFUE). The pre-installation standard for all replacement gas-fired heating systems is a minimum AFUE of 77.5%. The agency must verify these ratings before heaters are approved for installation. Ratings are verified by checking the proposed unit's efficiency in the most current edition of the directories of independent trade associations, such as the Gas Appliance Manufacturers' Association's Consumer's directory of Certified Efficiency Ratings or The Hydronics Institute's Boiler Ratings And Efficiencies.

Following the installation of a new gas-fired heating system, the agency heating system specialist must perform a combustion efficiency test to verify that the unit complies with program standards. This test should verify that the oxygen level is no greater than 9%, and that the carbon monoxide level does not exceed 100ppm in the flue gas and 9ppm in the ambient air.

These standards are only applicable to the extent that they are consistent with manufacturers' recommendations. If a heating system has specifications which require an oxygen level higher than that specified by program standards, manufactures'

literature (or a letter on manufactures' letterhead) evidencing this specification shall constitute sufficient grounds to establish the manufactures' specification as an alternate program standard applicable to that installation.

Before contacting the contractor or the manufacturer, the agency should be certain that the test results are accurate. This can be accomplished by making certain that:

1. The test kit is properly calibrated and the oxygen cell is in good condition.
2. The test probe is inserted in the proper place and the units are tested following the procedures described in the test kit's instruction manual.
3. The heater can be tested accurately i.e. an air-free sampling of the flue gas is possible.

It is the responsibility of the installing contractor to either:

1. Meet the general program standards
2. Provide the necessary documentation to justify the application of an alternative standard to that installation
3. To provide the necessary documentation to establish that the unit cannot be reliably tested under field conditions.

In cases concerning Power Vented Heating Systems, the agency field inspector must conduct an efficiency test to ensure the units compliance to the above stated standards.



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WEATHERIZATION BULLETIN #704

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Instructions For Testing Procedures That Can be
followed When Certain Conditions Are Found During a
Heating System Evaluation.

1. Carbon Dioxide too Low; Oxygen too High
(see attachment)
2. Smoke Levels above "1"
(see attachment)
3. Stack Temperatures too High
(see attachment)

These attachments suggest what to look for when the
above-captioned conditions are encountered.

CSS/bam/1845R

Enclosure(s)



CARBON DIOXIDE TOO LOW; OXYGEN TOO HIGH

This situation is usually a result of too much secondary air infiltrating into the combustion chamber (i.e., air that enters the system other than through the burner). If you suspect this is the case, test to see if the carbon dioxide or oxygen readings change appreciably (more than 1 percent) when the blower comes on. Also, check for an appreciable difference when the barometric damper is open. Make sure the draft in the breech is less than .03 inches of water. Remember that the new burner puts only $1/3$ to $1/2$ as much air into the unit, so that the draft loss across the unit is much less than before. Therefore, a low draft is sufficient.

If there is a difference in the carbon dioxide or oxygen reading, check for air leaks in the blast tube, doors, gaps between sections of the boiler, breech, fire box, etc. Seal whatever holes you find with the appropriate material. If the draft is excessive, reduce it.

Then check for infiltration of excess air (through the burner). Have you selected an appropriate head for the nozzle? The shutter and spinner should be set according to the manufacturer's instructions.

SMOKE LEVELS ABOVE "1"

High smoke levels could be caused by insufficient primary air. Check the air shutter. Consult the installation or manufacturer's literature for proper spinner setting, head, etc.

High smoke levels may also be caused by the flame touching the chamber wall. If this is the problem, consider using a smaller nozzle and higher pump pressure or a chamber liner that heats more rapidly.

This condition may also be caused by oil droplets that escape the circulating air pattern. Check the angle, pattern, and ratings of the nozzle to solve this problem.

STACK TEMPERATURES TOO HIGH

Stack temperatures that are too high often occur when the nozzle is too large. Check previous and present nozzle size to decide if the nozzle should be smaller.

Check the heat exchanger to see if something is preventing heat exchange. Check for soot in hard to get at areas of the exchanger. Check for any path that would allow hot gases to bypass the exchanger. Check for missing baffles or turbulators. It may be that the exchanger is poorly designed. If all else fails, note the manufacturer, design, model number, etc. and report the problem. It may be possible to obtain a waiver.

If the furnace is the hot air type, make sure hot air flow is unrestricted. Are any supply or return ducts closed or obstructed? Are the filters dirty? Check the blower motor to see that it is running fast enough, and that the belt is not slipping.

If your efficiency testing equipment consistently reads higher or lower than the inspector's, check your equipment for faults such as holes in hoses and faulty seals, and strong enough fluid. Review the manufacturer's instructions and re-calibrate.

Make sure when you sample stack gases, you do so from a point near the breech and before the stack control or barometric damper. Steady-state efficiency is an objective test based on chemical principles. Results should be the same no matter what brand of test equipment is used or who performs the test. Some slight variation may occur from one piece of equipment to another, but all commonly used tests will give similar results if the equipment is functioning, calibrated, and used properly.



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WEATHERIZATION BULLETIN #705

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Heating System Retrofit/Replacement Guidelines

These guidelines are applicable to retrofits and non-emergency heater replacements.

Retrofit Eligibility Guidelines

1. Clients meets WAP income guidelines
2. Client heats with oil
3. Client has supply of oil and unit is in working condition
4. The unit is operating at 72% or less steady state efficiency
5. Heating system output is less than 300,000 BTU's
6. Heating system has a life expectancy of at least 5 years

Heater Replacement Guidelines

1. Client meets WAP income guidelines
2. Client heats with oil or gas (coal-fired units will be considered for conversion on a case by case basis)
3. Unit has one or more of the following conditions:
 - a. Unit is inoperable
 - b. Unit is hazardous to operate, i.e., releasing toxic fumes into living area
 - c. Low efficiency rate due to specific problems
 - d. EA-QUIP audit recommends replacement *(based on actual C.E.T. reading)



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4. Heating System is rated at less than 300,000 BTU output (Residential Only)
5. Heating System has life expectancy of less than 3 years

To assist you in meeting program goals, and to reach more low income people, you now have authorization to retrofit multi-unit buildings that contain heating system that do not exceed 300,000 BTU's.

If you have any questions, please contact the Office of Low-Income Energy Conservation or your State Monitor.

CSS/bam/1864R



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WEATHERIZATION BULLETIN #706

September 28, 1998

To: Executive Directors and Weatherization Managers

From: Clarice S. Sabree-Sylvia, Supervisor, OLIEC

Affected Programs: DOE, DHS & HIP

Topic: Procedure for Approval of Heating System Improvement Services

Reference: (1) Weatherization Bulletin #703
(2) Weatherization Bulletin #723
(3) Weatherization Bulletin #725
(4) Weatherization Bulletin #726
(5) Weatherization Contracts, DHS, DOE, HIP

Revision Scope: Adds a provision which permits agencies to purchase up to \$50 worth of heating oil to facilitate the final inspection of oil-fired heating system replacements and retrofits.

To ensure that proper support documentation is on file for heating system replacements, and to facilitate testing of completed units, agencies should follow these procedures:

- I. Require the contractor who evaluates the heater to provide in writing why the unit must be replaced. The agency heater specialist must verify the contractors' findings unless the equipment in question (such as a heat pump) is not within his/her area of expertise. In those instances, it is advisable to get a second opinion from another contractor.

A cracked heat exchanger or boiler section is no longer a replacement justification unless the defective exchanger/section cannot be replaced. If the heater is in good condition otherwise, the repair option should be explored before replacement is considered. If the heater does not have at least a three year life expectancy, then replacement is the only option. ✓



- II. All heaters must be tested before a determination is made to replace it. If the heater is not working due to defective controls, replacement should not be considered if the controls can be replaced. If the life expectancy of the unit does not warrant repairs (less than three years), then no money should be expended on defective parts. If the client does not have oil, and this prevents post-installation testing, the agency is authorized to expend up to \$50 for oil, to ensure that all post-installation testing can proceed in a timely manner.
- III. The first priority for oil-fired systems is retrofitting. A unit should not be replaced instead of retrofitted solely on the auditor's opinion that a unit will not last 3 years. That opinion must be supported by facts as called for on the Heater Survey Form and Heating System Checklist.
- IV. All replacement heaters, (with the exception of mobile home heaters, electric resistance/warm-air units and heat pumps) must be certified as noted on the heater check-list. Agencies must use either the Gas Appliance Manufacturers Association, Consumers Directory of Certified Efficiency Ratings, or the Hydronics Institute, I=B=R Ratings for Boilers, Baseboard Radiation and Finned Tube (Commercial) Radiation to certify efficiency. Units that do not appear in the most recent publication of these books are not approved for installation.
- V. Any heater and shell treatments that exceed maximum program per unit costs must have justification in the form of an itemized listing of additional parts and labor. This includes distribution system repair or replacement, chimney lining and repair, oil tank treatments, etc. This data is called for on the Heating System Checklist and should be supported by cost itemization on the proposal.
- VI. All heater installations must meet post installation standards as noted in Weatherization Bulletin #703.



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WEATHERIZATION BULLETIN #707

September 28, 1998

To: All Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Affected Program: DOE, DHS & HIP
Topic: Authorization for Heating System Replacement
Reference: Not Applicable
Summary: Instructs Weatherization Managers to ensure that only agency personnel authorize contractors to replace heaters, and that program clients are aware of this procedure

All heating system replacement proposals must be approved by designated agency personnel prior to installation, per existing OLIEC policies.

Payment for approved and properly authorized heating system installations, which pass all required inspections, is to be made directly to the contractor who performed the installation.

Program clients are not to be reimbursed for expenses incurred as a result of failure to adhere to these procedures for authorization of heating system replacements.

Each potential candidate for a replacement heating system should be clearly informed that authorization to the contractor to proceed with the replacement can only be granted by the agency.

The OLIEC suggests that this Bulletin be shared with participating contractors as an additional step toward avoiding any possible misunderstanding of existing heating system replacement authorization policies.

CSS/bam/1868R





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WEATHERIZATION BULLETIN #708

September 28, 1998

To: All Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, ^{ASS}Supervisor, OLIEC
Re: Installing Heating Systems Where None Exist

All agencies have been told in the past that a heating unit cannot be installed where none exists.

It has become necessary to clarify what is meant by "where none exist".

The original intent of this directive was to prevent agencies from installing units in homes that were originally for seasonal use (e.g. summer cottages,) and as such, had no heating system.

It was not intended to cover homes where the heating plant is absent due to theft, vandalism, or removal by the owner.

When agencies encounter these types of situations, they should ask the client to submit an affidavit explaining the absence of the heating plant.

The agency should determine what type of system the client had by examining the remaining distribution system, to insure compliance with the same fuel source requirement.

CSS/bam/1870R





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WEATHERIZATION BULLETIN #709

October 2, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Affected Programs: DOE, DHS, HIP
Topic: Emergency Heating System Upgrades
Reference: (1) Weatherization Bulletin #502

Heating system replacement requests received from October 1st thru May 1st are to be considered emergencies because of the correlation of these dates to the need for heat. In accordance with N.J.S.A. 40A:11-6 (Local Public Contracts Law) the bidding process is not required for emergency installations.

Heating system replacement requests received from May 2nd thru September 30th will not be considered emergency situations. Agencies are required to follow a bidding process as per Local Public Contractors Law, N.J.S.A. 40A:11-1 et. seq. during this time period.

If a heating unit also provides hot water, making year round operation necessary, a separate hot water heater may be installed and handled as an emergency irrespective of time period.

CSS/bam/1880R





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WEATHERIZATION BULLETIN #710

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Heating and Distribution Systems Insulated with
Asbestos

Authorization to retrofit or replace a heating unit and/or its distribution system does not include asbestos abatement.

The U.S. Department of Energy prohibits use of DOE funds for asbestos abatement.

The Office of Low-Income Energy Conservation makes no recommendations on the removal of asbestos and does not require any contractor to take any action to disturb or remove asbestos materials.

Replacement or retrofit work performed under this program should not be construed as an authorization for identifying, handling or removing asbestos.

CSS/bam/1881R





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WEATHERIZATION BULLETIN #711

September 28, 1998

To: Executive Directors and Weatherization Managers

From: Clarice S. Sabree-Sylla, Supervisor, OLIEC

Affected Program: DOE, DHS, HIP

Topic: Carbon Monoxide (CO) testing of heating systems, hot water tanks, and gas ranges

Reference: DOE, DHS, HIP

Revision Scope: Provides specific instruction on contacting utilities for CO investigations and/or appliance adjustments.

Summary: The OLIEC requires that testing for carbon monoxide be a routine part of the combustion efficiency testing performed by the agency and/or contractor for both the pre- and post-tests performed on gas and oil fired heating systems, hot water tanks, and gas ranges, being evaluated for, or inspected after, retrofit, repair or replacement. Gas ranges must be tested for carbon monoxide emissions before and after a unit is weatherized.

The Office of Low-Income Energy Conservation (OLIEC) has determined that carbon monoxide testing will be incorporated into our combustion analysis procedures. The results of these tests will also be utilized during each health and safety inspection.

There can be serious and sometimes even fatal consequences from carbon monoxide spillage from flue gases of heating systems as a byproduct of combustion.

(continued)



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The OLIEC requires that carbon monoxide testing be conducted in all heating systems being evaluated for retrofit, repair, or replacement. Hot water heaters should also be tested at the draft hood after the ambient air test is completed. Gas ranges must also be checked for CO at the vent, the oven and in the ambient air. Both pre- and post-work CO tests must be conducted (see attached test procedures). This testing will be performed in low-income dwellings as a routine requirement of combustion efficiency testing by the weatherization agency and/or the contractor. The new combustion efficiency testing equipment available to weatherization subgrantees makes carbon monoxide testing relatively inexpensive and simple to perform. Staff of the OLIEC see this as just one more opportunity to take some definitive action to lessen the risk to the low-income population from undetected carbon monoxide. Clients must always be advised that a "safe" carbon monoxide reading is no guarantee that the heating system or living area will remain free of carbon monoxide. Conditions which affect CO levels may change.

If you have any questions, please contact your monitor for further clarification. Thank you for your concern and cooperation.

CSS/bam/1882R

TEST PROCEDURES FOR CARBON MONOXIDE

A. Subgrantees

1. Weatherization audit

- a. Test ambient air in kitchen and boiler/utility room area for carbon monoxide level.
- b. Test hot water tank at the draft hood.
- c. Test heating system flue gas for combustion efficiency (including smoke level and draft) and carbon monoxide level. Area tested should be free of secondary CO sources (such as burning cigarettes, etc.) when test is taken.

2. Final inspection of heater retrofit/repair/ replacement

- a. same as (a) above
- b. same as (b) above for a water heater replacement/repair
- c. same as (c) above

B. The threshold limit values for carbon monoxide are the following:

Heating System and Hot Water Tank

Gas Range

1. Ambient air: 9 ppm
2. Flue pipe: 100 ppm

1. Ambient Air 9 ppm
2. vent 100 ppm

- C. Should there exist a carbon monoxide concentration (ppm) that is above the aforementioned threshold limit values, the client will be so advised, and the agency will contact the local utility using the procedures in E.(8) and E.(9).
- D. If the heater in question has been retrofitted, repaired or replaced with Weatherization Assistance Program funds, the contractor will be contacted by the agency, and required to return to the site to make adjustments to the unit.

E. Inspection Procedures for Gas Ranges

1. Visual Inspection

Check burners for blockage
Check oven and broiler door for proper closure
Check for flammable materials near burners or in oven.

2. Interview Client

Are all components of the appliance operational?
Has the appliance been redtagged by the local utility?

3. Ask client to turn on the burners and set the oven on 350 degrees. If the burners fail to ignite within 3 seconds or the oven fails to fire within 5 seconds, ask the client to turn off the appliance and test the ambient air only.

4. Examine the flame of burners for color and shape (should be blue and consistent, without gaps)
5. After 5 minutes of operation, insert the probe into the vent for a reading (with oven door closed)
6. Open the oven door and hold the probe in front of the appliance for an ambient air reading
7. If there is no significant CO present, ask the client to turn off the appliance
8. If the final test results are 100 ppm or greater and the ambient air reading is 9 ppm or greater:

The agency will contact the clients' utility and request a "carbon monoxide investigation".

9. If the final reading is 100 ppm or greater and the ambient air reading is less than 9 ppm:

The agency will contact the clients' utility and request an "appliance adjustment for emissions"

F. CLIENT EDUCATION

All clients shall be provided the following information:

1. A gas range should never be used as a space heater
2. When using the appliance for cooking, proper ventilation is recommended (an exhaust vent or an open window);
3. Regular cleaning may prevent malfunctions that can create CO emissions

G. TESTING NON FEASIBILITY

Agencies should not test the gas range if the following conditions exists:

1. The appliance is obviously beyond repair ex. missing, broken, or inoperable parts
2. The appliance is clogged with food or other debris, and the client declines to clean the appliance

H. REPLACEMENT RECOMMENDATION

If the client is a tenant, and there is an inoperable or hazardous gas range, the landlord should be advised by the agency that the appliance must be replaced for health and safety before weatherization can be done



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WEATHERIZATION BULLETIN #712

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Consumer Product Safety Commission Product Warning

The Consumer Product Safety Commission has issued a product warning for the Coleman, Solar-Pak Mobile Home Furnace, Model # 8600.

The commission reports that carbon monoxide may leak from this unit due to a combination of the following factors:

1. Improper installation
2. Alterations
3. Modifications
4. Inadequate maintainance

If your agency encounters one of these units, contact the Coleman Company at (1-800-232-7657).

Coleman is offering discounts of up to 50% on replacement or repair of these units.

CSS/bam/1888R





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WEATHERIZATION BULLETIN #713

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Re: Potentially Hazardous High-efficiency Furnaces and Boilers

Attached you will find a list of High-efficiency Furnaces and Boilers that have been cited by The Consumer Product Safety Commission.

It is suggested that this list be used as a reference when replacing or retrofitting heating systems to ensure that all units installed under the Weatherization Assistance Program operate safely.

CSS/bam/1892R

Enclosure(s)



Problem: Furnaces may corrode internally and allow deadly carbon monoxide gases to leak out into living areas.

Gas Furnaces: 60,000 units

Manufacturers: ARKLA and Preway

Brand Names:

1. Heat Controller, Century Reclaimer I
Comfort-Aire, Reclaimer I models GRU, GRD,
GRU-P, GRD-P
2. TRANE CAC ELITE
Models BLU XXXH, BLDXXXH, BLUXXXP, BLDXXXP
(X=any character)
3. General Electric ELITE
Models BLUXXXH, BLDXXXH
4. ARCO/Snyder Arcoaire
Models GUE, GDC
5. Climate Control/Snyder Comfortmaker
Models G-U601, G-C611
6. ARKLA Recuperative I
Models UR, DR, UR-P, DR-P, Beginning with
Serial #200000

Solution:

Phone manufacturer (1-800-237-5207)

Manufacturer will install upgrade kit at no charge; if corrosion is very severe, furnace will be replaced on a prorated basis.

Advise clients not to store products containing chlorine or fluorine near furnace. Products such as paint stripper, salt for melting ice, fabric and water softener, bleach, and adhesives can cause corrosion.

NOTE:

We are not suggesting that these units should not be used, but that you contact the manufacturer to insure that any necessary upgrades have been completed before installation.

Problem: Unless maintained properly every year, furnace or boiler could cause death by carbon monoxide poisoning.

21,000 furnaces and 14,500 boilers produced from 1974-1983

Manufacturer: Blueray Systems, Inc.

Brand Name: BLUERAY

Model: BR 60/75

Solution:

To receive description of proper maintenance and service procedures and cautionary label; call 215-789-6224 collect or write:

Blueray Systems, Inc.
8301 Lansdowne Avenue
Upper Darby, PA 19082

NOTE: The Consumer Product Safety Commission has advised that only specially trained BLUERAY Service technicians should service these units.

Since these units require rigorous maintenance and specialized service technicians, it may not be advisable to install these units unless the installer and manufacturer can guarantee safe operation throughout the unit life.



State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

JAMES E. MCGREEVEY
Governor

WEATHERIZATION BULLETIN #714

SUSAN BASS LEE
Commissioner

November 6, 2002

To: Executive Directors and Weatherization Managers

From: Clarice S. Sabree-Sylla, Supervisor
Office of Low-Income Energy Conservation

Affected Programs: DOE, DHS, HIP

Topic: Establishes policies concerning the repair, and replacement of water heaters.

Reference: (1) DHS Contract, Attachment C
(2) 10 CFR 440 C, Appendix A
(3) HIP Contract, Attachment C
(4) Weatherization Bulletin #711

Summary: Installation of new water heaters is permissible under the DHS, DOE Weatherization, Home Energy, and Heating Improvement. Repairs of water heaters are also permitted.

Replacement of existing domestic water heating systems may be performed under the following circumstances:

1. The domestic water heating system is operating in a hazardous manner, which can only be corrected through complete unit replacement. "Operating in a hazardous manner" includes, but is not necessarily limited to:

production of excessive Carbon Monoxide (see, Weatherization bulletin #711).

Flue, venting, or installation conditions which permit combustion by-products to enter the living space, present a fire hazard, or which otherwise violate applicable codes.

(Continued)



Inability of the unit to properly regulate temperature of hot water produced.

Improper configuration, or absence, of pressure release mechanisms.

2. The domestic water heating system must be replaced in order to facilitate a properly authorized heating system repair, retrofit, or replacement.
3. A boiler is authorized to be replaced and the boiler supplies domestic hot water by means of an integral tankless coil (a separate boiler and standard tank-type domestic water heater can be installed).
4. Unavoidable damage is sustained by the domestic water heater in the course of an authorized heater repair, retrofit, or replacement.

New water heaters must meet the minimum energy factors as listed below:

.62Gas

.62Oil

.90 Electric



State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

CHRISTINE TODD WHITMAN
Governor

JANE M. KENNY
Commissioner

WEATHERIZATION BULLETIN #715

September 28, 1998

To: Executive Directors and Weatherization Managers

From: Clarice S. Sabree-Sylla, Supervisor, OLIEC

Affected Programs: DOE, DHS, HIP

Topic: Heating System Repairs

Reference: (1) HIP Contract
(2) DOE Contract
(3) DHS Contract
(4) HEA Contract

Summary: Repairs to heating systems are a permissible tactic under the Heating System Improvement, HEA, DOE and DHS Programs. Repairs may either stand alone or be applied in conjunction with a replacement or retrofit.

Repairs are permissible when the agency heating system specialist or agency's consulting contractor determines that repairable conditions exist which either create a hazardous operating condition, violate applicable codes, or shorten the life expectancy of the system.

When repairs are performed in conjunction with a retrofit, the contractor's proposal must itemize the material and labor cost for the repair separately from the standard retrofit fee.

Whenever any work is performed on a forced-air furnace which does not have a cold air return duct, one must be added as a mandatory heating system improvement tactic.

(continued)



Repairs should not be performed if, following the repairs, the unit still will not have at least a three year life expectancy.

Allowable repairs include, but are not necessarily limited to:

1. stack pipes,
2. supply and return duct runs,
3. baseboard sections or radiators,
4. expansion tanks,
5. oil supply lines and/or oil tanks,
6. chimney liners,
7. electrical wiring,
8. emergency and/or relay switches.

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State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

CHRISTINE TODD WHITMAN
Governor

JANE M. KENNY
Commissioner

WEATHERIZATION BULLETIN #716

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Affected Programs: DOE, DHS, HIP
Topic: Underground Oil Storage Tanks
Reference: DOE, DHS & HIP Contracts
Summary: Describes a procedure to be followed when replacing a leaking underground oil storage tank. Necessary steps include draining, cleaning, filling and capping. OLIEC assistance is available upon request if mediation with local code officials is needed.

Replacement of leaking oil tanks used for storing residential heating fuel is a permissible tactic under all weatherization programs.

If the tank is underground, replacement will include the proper retirement of the leaking tank. This retirement procedure is as follows:

1. Drain and clean the tank.
2. Fill tank with an insert material (ie. sand).
3. Cap and permanently seal the tank's fill opening.

In the event that local code officials refuse to grant a work permit, or demand excavation and removal of the tank, request a copy of the local ordinance which prohibits the retirement procedure described above.

(continued)



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Agency staff should follow local administrative procedures to appeal the decision of the code official and request a waiver or variance on behalf of the client.

If this request is denied, the agency should contact OLIEC. Agency and OLIEC representatives will then meet with the local code officials to mediate a solution to the problem.

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State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS

CHRISTINE TODD WHITMAN
Governor

JANE M. KENNY
Commissioner

WEATHERIZATION BULLETIN #717

September 28, 1998

To: Executive Directors and Weatherization Managers
From: Clarice S. Sabree-Sylla, Supervisor, OLIEC
Affected Programs: DOE, DHS, HIP
Topic: Fuel Type Conversions
Reference: (1) Weatherization Bulletin #705
(1) Weatherization Bulletin #708
Summary: Replacement heaters must generally operate with the same type of fuel as those they replace

Replacement heating systems installed under all weatherization programs must operate with the same type of fuel as the units which they replace.

An exception to this rule applies when the system to be replaced operates on coal or other solid fuels. Solid fuel burning heating systems may be replaced with systems which operate on either oil or gas. The decision whether to install an oil or gas system will be based on an analysis of the full installation cost for each system type. The full installation cost includes such items as oil tanks, gas lines and meters, and venting in accordance with code.

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